

IDENTIFYING DATA				
Forest entomology and Zoology				
Subject	Forest entomology and Zoology			
Code	P03G370V01305			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	2nd	1st
Teaching language				
Department	Natural Resources and Environment Engineering			
Coordinator	Paz Bermudez, Maria Graciela			
Lecturers	López de Silanes Vázquez, María Eugenia Paz Bermudez, Maria Graciela Souto Otero, José Carlos			
E-mail	graciela@uvigo.es			
Web	http://http://faitic.uvigo.es/index.php/es/			
General description	(*)Esta materia ensina ó alumnado os fundamentos de zooloxía, con énfase nas especies máis comúns nos nosos bosques. Dada a gran importancia da entomoloxía no medio forestal, unha parte importante da materia adicarase a esta disciplina. Finalmente, outro bloque de temas centrarase en xenética, especialmente na de poboacións, co fin de que o alumno poida adquirir uns coñecementos fundamentais para comprende-la dinámica e a evolución das poboacións animais.			

Competencies	
Code	
B1	Ability to understand the biological, chemical, physical, mathematical and representation systems necessary for the development of professional activity, as well as to identify the different biotic and physical elements of the forest environment and renewable natural resources susceptible to protection, conservation and exploitations in the forest area.
C13	Ability to know, understand and use the principles of: forest zoology and entomology; biological foundations of the animal field in engineering.

Learning outcomes		
Expected results from this subject	Training and Learning Results	
(*)	B1	C13

Contents	
Topic	
I. General zoology	1. Introduction to the zoology 2. Structure of the animal cells 3. The cellular division 4. The fabrics
II. Genetic	1. Introduction to the mendelism 2. Nature of the hereditary material 3. Genetic structure of the populations 4. Changes of the genic frequencies 5. The continuous variation
III. Descriptive zoology	1. General characters of the invertebrates 2. Entomology. Characteristic and importance of the insects 3. Cordados. Introduction to fishes, amphibious and reptilian 4. Birds and mammalian

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	32	48	80
Laboratory practices	16	26	42
Problem solving	4	24	28

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Lecturing	Presentation by the teacher of the contents on the subject under study, theoretical and / or guidelines for a job, exercise or project to be developed by the student.
Laboratory practices	Activities application of knowledge to specific situations and basic skills acquisition and related procedural matter under study. Special spaces are developed with specialized equipment (scientific and technical laboratories, languages, etc.).
Problem solving	Activity which formulated problem and / or exercises related to the course. The student should develop appropriate solutions or right through the exercise routines, application of formulas or algorithms, application processing procedures available information and interpretation of the results. It is often used to complement the lecture.

Personalized attention

Methodologies	Description
Lecturing	
Laboratory practices	

Assessment

	Description	Qualification	Training and Learning Results	
Lecturing	(*)1.-Probas de tipo test 2.-Probas de respuesta corta 3.-Probas de respuesta larga, de desarrollo	75	B1	C13
Laboratory practices	(*)Informes/memorias de prácticas e/ou examen práctico	20		C13
Problem solving	(*)	5		

Other comments on the Evaluation

Sources of information

Basic Bibliography

Complementary Bibliography

Davies RG, **Introdución a la entomología**, 1989,

Falconer DS, Mackay TFC, **Introducción a la genética cuantitativa**, 1996,

Hickman CP, Roberts LS, Keen S, Larson A, I'Anson H, Eisenhour D, **Principios integrales de zoología**, 2009,

Paniagua R (coordinador), **Citología e histología vegetal y animal**, 2007,

Barrientos JA (ed), **Curso práctico de entomología**, 2004,

Carlos de Liñán Vicente (coord), **Entomología agroforestal**, 1998,

Chinery, M., **Guía de campo de los insectos de España y de Europa**, 2005,

Recommendations

Subjects that are recommended to be taken simultaneously

Forestry Ecology/P03G370V01402
Mathematics: Statistics/P03G370V01301